CENVIRONMENTAL

Gordon L. Brown, Ph.D. Vice President, Western Region

:

CANTOX ENVIRONMENTAL INC
111-5th Avenue S W., Suite 1160
Calgary, AB T2P 3Y6
Tel 403-237-0275 Fax 403-237-0291
E-mail gbrown@cantoxenvironmental.com
www.cantoxenvironmental.com



Michael D Dutton, Ph.D. Scientist

CANTOX ENVIRONMENTAL INC
111-5th Avenue S W , Suite 1160 ,
Calgary, AB T2P 3Y6
Tel 403-237-0275 Fax 403-237-0291
E-mail mdutton@cantoxenvironmental com
www cantoxenvironmental com

This environmental consulting the first is conducting the Ecological Risk analysis for the Trail area Contaminated Site.



ECC Minutes: 10/20/99

ENVIRONMENTAL CONSULTATIVE COMMITTEE

Minutes of the October 20, 1999 meeting. Held at the Interpretative Center, Trail, B.C.

Frank SS

ECC members attending:

(b) (6)

- Village of Warfield
- Tadanac
- City of Trail
- Northport Grange
- J.L. Crowe Senior School
- J.L. Crowe Senior School
- J.L. Crowe Senior School
- Citizens for a Clean Columbia
- Selkirk College

Cominco:

Bill Duncan Mark Edwards Richard Fish Sherry Nicholson

BCMELP:

Carl Johnson

The meeting was opened by (b)(6) at 7:00 pm. Two items of new business were added to the agenda concerning the MOE and Cominco colocation study and trees at the Northport air monitoring site.

(b)(6) the new member representing Tadanac, was introduced to the ECC.

The minutes of the September 15, 1999 meeting were read and corrected. (b)(6) moved to approve the minutes, (b)(6) seconded the motion and the minutes were approved.

(b)(6) contacted **for** the Lead Task Force to make a presentation to the ECC. This will be arranged for a future meeting. The latest information shows the blood lead levels to be the lowest on record.

(b)(6) reported that several Trail area residents have experienced a difference in dust deposition. They note

· ECC Minutes: 10/20/99

expense of collecting data that is worthless.

It was (b) (6) 's conclusion that the proposed study was superfluous and the funds would be better spent initiating a program to conduct colocation monitoring along with Cominco's air monitors. This would be a program in which the MOE independently operated air monitors at two of Cominco's ten locations at all times. The two MOE monitors would be rotated among the Cominco locations. The monitors would be operated and serviced by MOE personnel and the filters analysed at an MOE designated laboratory.

This would be comparable to EPA practice in the U.S. where they conduct independent colocation monitoring at 25 percent of all air monitoring sites.

(b)(6) suggested that the ECC recommend this proposal to MOE as an alternative to the proposed MOE/Cominco study. It was decided to ask MOE about this in the next hour of the meeting.

At 8:00 pm Cominco and MOE joined the ECC meeting.

Sherry Nicholson continued the presentation of Cominco's Environmental Management System with a description and examples of the Environmental Aspect Assessment process. A copy of the overheads outlining this process are appended to the minutes.

Richard Fish reported that the vehicle wash system is proceeding. Richard and Mark Edwards reported on the recent total power outage. The failure resulted from a BC Hydro switching error. The emergency safety systems at Cominco worked well. Of course, gas was emitted to the atmosphere to prevent serious failure and damage. The safety systems will be reviewed and additional auxillary power provided where necessary. Cominco has some auxillary power backup and power switching capabilities in cases of partial power failure.

Marh Edwards reviewed Cominco's procedures for logging, investigating and reporting of public concerns and complaints. Mark reported that all air monitoring stations were audited. At the Oasis and Northport sites some trees were on private property and could not be removed. All sites will be reassessed at the end of 1999 and corrected or relocated as necessary.

Carl Johnson stated that MOE wants to determine whether there is any difference between the Cominco and MOE air monitoring procedures. Carl supported continuing the Cominco procedures until data is collected for the Kivcet



September 27th 1999

File: PA 2690, PA 2691

(b)(6)

Kettle Falls WA 99141 USA

Dear(b)(6)

Re: Comparison of Cominco and Ministry Air Sampling Procedures.

In a recent informal air quality monitoring audit conducted by Victoria headquarters staff from the Ministry of Environment, Lands and Parks (MELP), some minor procedural differences were noted in Cominco's handling of filters and that followed by MELP.

To determine if these differences are significant, Cominco and MELP have agreed to undertake a "side-by-side" study of Hi-vol total suspended particulate that would answer the question "is there a statistical difference in results as a consequence of these procedural differences?".

As a member of the Environmental Consulting Committee (ECC), we have attached an outline of this study for your review. We welcome your comments and wish to inform you this will be the topic of discussion at the next ECC meeting, October 20th 1999.

Yours truly,

utila M. Beatty, R.P.Bio.

Head, Environmental Assessment Section

Kootenay Region

CC:

Garry Bell

Carl Johnson

Garry Gawryletz, Cominco



FACTS ON CONTAMINATED SITES

Highlights of New Legislation and Regulations

The Waste Management Amendment Act, 1993 was passed by the British Columbia legislature in June, 1993. It came into effect on April 1, 1997 following Order-in-Council approval of contaminated sites regulations in December 1996. This fact sheet is part of a series explaining the scope, intent and provisions of the legislation and regulations Other fact sheets are available to provide further information on specific contaminated sites topics of interest.

What are the Goals of the New Legislation? The legislation sets out to:

- ensure environmental protection;
- bring uniformity to the administration of contaminated sites;
- establish requirements for site remediation, assessment and soil relocation;
- provide flexible standards to measure remediation efforts;
- provide easy access to site information; and
- present clear and predictable circumstances for liability for site cleanup.

Historical contamination of soil, surface water, and groundwater will be addressed through a comprehensive regulatory system. The legislation, and the regulations, address all stages of management from site identification, through evaluation of remediation options to monitoring remediation performance.

The contaminated sites legislation coordinates government activities by delegating specific regulatory functions to local governments or to other provincial ministries. It defines roles of the province and of local governments and provides immunity for local governments and other ministries carrying out their administrative functions.

Key Features of the Legislation and Regulation Site Registry A Site Registry permits easy access to information about sites in BC. Basic characteristics of a site, as well as legal events and milestones in the remediation process will be recorded. The registry also provides information for land transactions and will serve as a ready source of information for the general public. It will be publicly accessible by computer through BC OnLine.

Fees The legislation provides for cost recovery fees to offset contaminated sites regulatory and administration costs. The fees under the legislation and regulation build upon those in the Contaminated Sites Fees Regulation, which came into effect on July 1, 1995, under the existing provisions in the Waste Management Act.

Alternate Dispute Resolution Because of potential legal actions or lawsuits, resolving disagreements about responsibility and liability issues is often critical in contaminated site remediation. The legislation creates allocation panels which responsible parties

3. Planning Stage – Determining Liability Currently, responsibility for remediation is stated very broadly in the Act. Regional Pollution Prevention Managers have broad authority to order investigations and site cleanup. In its current form, it is not easy to predict responsibility and there are no exemptions from liability. The legislation brings clarity and predictability to liability issues, facilitating planing for future costs.

The legislation first casts a relatively "broad net" of liability. Persons potentially responsible, for example, may include current or former owners of a contaminated site or a site from which contamination migrated. Persons potentially responsible may also include producers or transporters of substances.

To achieve fairness and to implement the "polluter pays" principle, the legislation then provides many exemptions from liability including:

- a government body involuntarily acquiring ownership of contaminated land;
- a person whose site is contaminated only by migration from another site; and
- secured creditors who act only to protect their financial interest and do not, in any way, cause or increase contamination.

The legislation allows a manager to conferminor contributor status to a person who contributed only a minor part of the contamination at a site. This shields against private lawsuits and remediation orders from BC Environment, thus limiting liability. Additional liability provisions relate to ministry remediation orders.

General liability principles follow those already in place in the Waste Management Act, concerning pollution abatement order powers. A person who is responsible for remediation is absolutely, retroactively, and jointly and severally liable.

Assessing Need and Priority for Remediation Criteria are provided to guide managers in determining the need and priority for remediation orders. If a contaminated site needs to be remediated, the timing will depend on the severity of the actual or potential impacts. Some sites may not need to be cleaned up for years, or ever.

Activating Remediation A voluntary remediation agreement or a remediation order can be used to document responsibility and to set out conditions required to address contamination. A voluntary remediation agreement may be used where a person agrees to responsibility and remediation procedures. It may deal with: responsibility and contributions to remediation; information disclosure; financial guarantees; remediation schedules; and requirements to achieve satisfactory remediation.

A regional Pollution Prevention Manager may issue a remediation order if a person will not agree to responsibility or remediation requirements. It deals with similar matters to a voluntary remediation agreement.

Evaluating Remediation Options
Identification and investigation of a
contaminated site may be followed by
planning for remediation. There are often
several different options to clean up a site and
one, or a combination may be selected. The
legislation provides explicit criteria for
evaluating options including: effects on
human health and the environment;
technical feasibility and risks; and remediation
costs and economics.

Approvals in Principle Financing and local government development approvals of sites with contamination can be significantly impeded without a clear process for dealing with contamination. A local government or a lender may require assurance that a site has been adequately investigated and that acceptable plans have been developed for remediation.



11/3/97 UPDATE ON CONTAMINATED SITES

Site Registry Implemented

The Site Registry is now available through BC OnLine. This new service allows you to view information about sites in which the province has an environmental interest.

New contaminated sites provisions came into effect April 1, 1997 requiring the province to provide public information on site cleanups and investigations. A new public Site Registry mandated under the *Waste Management Act* (the *Act*) has been developed and was implemented on November 3, 1997 to meet this requirement.

What is the Site Registry?

The Site Registry documents milestones in the site cleanup process, and provides public access to this information. It is not strictly a registry of contaminated sites. While some sites on the registry are contaminated, most sites listed have simply been investigated and require little, if any cleanup, or have already been cleaned up to government standards.

Electronic and Paper Records

The Site Registry contains both electronic and paper records. The electronic Site Registry summarizes the investigation and cleanup history for sites in B.C. The paper Site Registry contains detailed information in documents used to create the electronic Site Registry.

What Information is Contained in the Site Registry?

The electronic Site Registry currently contains information generally grouped under five categories.

- 1) General information concerning a site's location, cleanup status and site profile.
- 2) Notations information concerning legal and administrative events under the Act.
- 3) Participants information about people and organizations involved with a site.
- 4) Documents information regarding the existence of reports concerning a site.
- 5) Land Use information concerning land use related to a site.

Two categories still to be developed are:

- Assessments general information related to the main substances found at a site.
- 2) Remediation Plans —information on cleanup plans used and cleanup standards.

Accessing the Site Registry

Access to the electronic Site Registry is through an account with BC OnLine, which provides access to a number of government databases such as the Land Titles system. Contact the BC OnLine Help Desk at (250) 952-6777 (Victoria) or (604) 775-2265 (Vancouver) to set up an account. As a new feature, BC OnLine is offering the Site Registry on its world wide web site. If you have an account, the Site Registry User's Guide may be downloaded from that web site.

If you do not have a BC OnLine account or do not wish to set one up, contact a regional BC Environment office or Government Agent for advice on having a search of the electronic Site Registry carried out.

BC ENVIRONMENT CONTACTS ON CONTAMINATED SITES ISSUES

BC Environment Regional and Sub-Regional Offices

 BC Environment Vancouver Island Regional Office 2080-A Labieux Road Nanaimo, British Columbia V9T 6J9

Tel: 250-751-3100 Fax. 250-751-3103

Attention: Pollution Prevention Manager

 BC Environment Lower Mainland Regional Office 10470 152nd Street Surrey, British Columbia V3R 0R3

Tel: 604-582-5200 Fax: 604-582-5334

Attention: Pollution Prevention Manager

 BC Environment Southern Interior Regional Office 1259 Dalhousie Road Kamloops, British Columbia V2C 5Z5

Tel: 250-371-6200 Fax: 250-828-4000

Attention: Pollution Prevention Manager

 BC Environment Southern Interior Sub-Regional Office 201 - 3547 Skaha Lake Road Penticton, British Columbia V2A 7K2 Tel: 250-490-8200

Fax: 250-492-1314

Attention: Pollution Prevention Manager

 BC Environment Kootenay Regional Office 401 - 333 Victoria Street Nelson, British Columbia VIL 4K3

Tel: 250-354-6355 Fax: 250-354-6367

Attention Pollution Prevention Manager

 BC Environment Kootenay Sub-Regional Office 205 Industrial Road G Cranbrook, British Columbia V1C 6H3

Tel: 250-489-8510 Fax: 250-498-8506

Attention: Environmental Safety Officer

BC Environment
 Omineca-Peace Regional Office
 1011 - 4th Avenue
 Prince George, British Columbia
 V2L 3H9

Tel: 250-565-6155 Fax: 250-565-6629

Attention: Pollution Prevention Manager

BC Environment
 Cariboo Regional Office
 Suite 400 - 640 Borland Street
 Williams Lake, British Columbia
 V2G 4T1

Tel: 250-398-4533 Fax: 250-398-4296

Attention: Pollution Prevention Manager

 BC Environment Skeena Regional Office 3726 Alfred Street Bag 5000 Smithers, British Columbia VOJ 2N0

> Tel: 250-847-7260 Fax: 250-847-7591

Attention Pollution Prevention Manager

BC Environment Victoria Headquarters Office

Mailing Address

BC Environment
Pollution Prevention & Remediation
Branch
Box 9342 Stn Prov Govt
Victoria, BC V8W 9M1
Attention: Site Administrator
Telephone: 250-387-4441

Delivery address:

BC Environment
Pollution Prevention & Remediation Branch
3 - 2975 Jutland Road
Victoria, BC V8T 5J9
Attention: Site Administrator
Fax 250-387-9935



10/21/97 UPDATE ON CONTAMINATED SITES

Ministry of Environment, Lands and Parks

Enhanced Local Government Immunity For Administration of Contaminated Sites

Recent amendments were made to the Waste Management Act (the Act) to enhance liability protection for local governments who administer certain contaminated sites provisions. The amendments were part of the Local Government Statutes Amendment Act (No. 2), 1997, which was passed in July, 1997.

Background

In the early 1990s local governments told the provincial government they wanted a legal process to screen potentially contaminated sites. As a result, a local government role in administering site profiles was included in new contaminated sites legislation. During consultations on draft contaminated sites regulations, some local governments were concerned about their potential liability in administering site profiles and other legislated functions. Nine specific questions about the ability of the legislation to provide adequate local government immunity were identified.

Independent Legal Advice

These questions were reviewed by a panel of municipal and environmental law experts who were members of the Canadian Bar Association. The final panel report was submitted to the ministry in May 1995. It provided a number of recommendations, including a proposed expansion of the wording of the immunity provisions for local governments administering contaminated sites functions under the *Act*.

Key Changes

Administration of Delegated Functions

In addition to site profile administration, local governments may, by agreement, take on several other administrative functions. These include issuing Approvals in Principle, Certificates of Compliance and Conditional Certificates of Compliance. The amendments clarify that local governments have liability protection if they rely on any of these items in carrying out their work, irrespective of who prepared them. They also provide immunity for local governments relying on determinations of contamination made by the ministry officials.

Corporate Immunity

New immunity is extended to local governments in their capacity as corporations.

Voluntary Contaminated Sites Functions
Liability coverage is expanded to local
governments' discretionary and voluntary
contaminated sites functions.

Immunity Under Other Statutes

When the Act was amended, amendments to a number of other statutes were also made in connection with the administration of site profiles. They include the Land Title Act, Municipal Act, Vancouver Charter, and Islands Trust Act. Immunity has now been extended to local government site profile administration under these statutes.



UPDATE ON CONTAMINATED SITES

Ministry of Environment, Lands and Parks

Local Governments Which Have Opted Out of the Site Profile System

New provisions in the Waste Management Act and Contaminated Sites Regulation create a provincial system to screen for potentially contaminated sites using site profiles.

There are a number of exemptions from the duty to submit a site profile. Under the regulation, an important exemption exists if a local government decides it does not want to administer provincial site profiles. It can opt out of the site profile system, by writing to the Minister of Environment, Lands and Parks.

Local governments cannot opt out of the entire contaminated sites legal system. This means that all land owners and operators will still be subject to other provisions in the

contaminated sites regime, even though a local government has decided not to administer the provincial site profile system.

10/16/97

The following local governments have indicated that they do not wish to receive site profiles under the new contaminated sites system. As a result, persons who would otherwise have a duty to submit a site profile

- to an Approving Officer when applying for subdivision, or
- to local government when applying for zoning, soil removal or a development or demolition permit,

are exempt as of October 16, 1997 for the following areas:

- Alert Bay, Village of
- Armstrong, City of
- Cariboo Regional District
- Central Coast Regional District
- Comox, Town of
- Coquitlam, City of
- Creston, Town of
- East Kootenay Regional District
- Enderby, City of
- Esquimalt, Township of
- Fernie, City of
- Gibsons, Town of
- Gold River, Village of

- Invermere, District of
- Islands Trust
- Langley, Township of
- Lions Bay, Village of
- Logan Lake, District of
- Lumby, Village of
- Nakusp, Village of
- North Cowichan, District of
- North Okanagan, Regional District of
- Okanagan-Similkameen Regional
 District
- Peace River Regional District

- Port Alice, Village of
- Port Clements, Village of
- Port Hardy, District of
- Port McNeill, Town of
- Pouce Coupe, Village of
- Powell River Regional District
- Radium Hot Springs, Village of
- Rossland, City of
- Sechelt, District of
- Sidney, Town of
- Spallumacheen, Township of
- Summerland, District of
- Vernon, City of

This list is subject to change at any time. The ministry does not take any responsibility for any errors or omissions in this list. Please check with your local government to confirm.

For more information, contact the Pollution Prevention and Remediation Branch, (250) 387-4441. October 1997



FACTS ON CONTAMINATED SITES

Site Profiles — Local Governments Duties

BC's Contaminated Sites Regulation under the Waste Management Act (the Act) contains a site profile form. It requires information on the past and present uses of a site, basic land descriptions and is an initial screening tool for identifying sites that might be contaminated.

Who Will Submit Site Profiles?

Developers, owners and vendors of property, as well as local governments (as land owners) may have to submit site profiles.

What Triggers Site Profiles?

Usually subdivision, development, zoning, and demolition applications for property, or soil removal applications. (The numbers refer to the figure on the other side of this fact sheet).

How Do Land Uses Relate to a Site Profile?

A site profile is required if a site has been used for industrial or commercial activities listed in Schedule 2 of the regulation. If a site has been used exclusively for residential use, a profile is not required.

Are There Any Exemptions?

There are numerous exemptions in the regulation, for example, when a local government applies to zone or rezone land if it does not have an ownership interest in the land. If any of the exemptions apply, a site profile is not required.

What Are Local Governments' Main Duties? They must assess and forward site profiles needing further review to the ministry within 15 days.

What are the Assessment Duties?

- Local government officials will assess if the form is completed properly. If it is not, they will notify the person providing the site profile that it is not satisfactorily completed.
- When the site profile has been properly completed, local government officials will assess whether any 'yes' answers are provided.

What are the Forwarding Duties?

government officials will forward the site profile to a regional Pollution Prevention Manager. If there are all 'no' answers, it will be forwarded to the Site Registrar in Victoria.

Who Keeps Track of Sites?

The Act creates a Site Registry overseen by the Site Registrar. It is a database that will be accessible to all British Columbians through the BC OnLine computer system. It is expected to reduce the volume of inquiries received by local governments about contaminated sites.

Do Site Profiles Affect Development Applications?

If a site profile is forwarded to a regional manager, the development application is 'frozen' until the manager makes a decision, usually within 15 days, whether the site requires investigation.

For more information, contact the Pollution Prevention and Remediation Branch, 387-4441



6

FACTS ON CONTAMINATED SITES

Site Profile Administration – Local Government Opt Out Option

A provision in the Contaminated Sites Regulation allows local governments to opt out of administering the site profile system. This fact sheet describes some of the advantages and disadvantages for local governments which opt out of the system.

What are Site Profiles?

The Waste Management Act (the Act) creates a system for screening property for possible contamination. It uses site profiles. These are forms that require information about the past and present uses of a site, as well as basic land descriptions. The form and associated administrative requirements for using the form are described in the Contaminated Sites Regulation.

Some local governments were already using a site screening system, even before the Contaminated Sites Regulation came into effect. One local government even adopted a draft version of the site profile form in bylaw. Others implemented their own screening systems.

Who Submits Site Profiles, and When? Developers are required to provide site profiles to local governments when they apply for subdivision, zoning, or development permits on land which has previously been used for certain types of industrial or

commercial activities. For more detail, consult the BC Environment publications Fact Sheet 5, "Site Profiles – Local Government Duties" and Fact Sheet 7, "Local Government Immunity for Site Profile Administration."

How is Local Government Involved? The Act assigns two administrative duties to local governments in handling site profiles.

Assessment Duties

Local government officials will first check if the site profile is completed properly. If it is not, they will inform the person providing the site profile that it needs further work. Once it is determined that the form is completed satisfactorily, then the officials will determine whether any "yes" answers are provided.

Forwarding Duties

If there are any "yes" answers, the local government official will forward the site profile to a regional BC Environment manager. If there are all "no" answers, it will be forwarded to the Site Registrar in Victoria.

How Can Local Government Opt Out?
At the 1995 spring UBCM environmental conference, the ministry proposed that local government be given the choice to not participate in the administration of site profiles. This option is incorporated in the Contaminated Sites Regulation:



FACTS ON CONTAMINATED SITES

Local Government Immunity for Site Profile Administration

Why Screen Sites for Contamination? During consultations on proposed contaminated sites amendments to the Waste Management Act (the Act), local governments told BC Environment that they wanted a legally defined, uniform process to screen potentially contaminated sites. In response, a local government role in administering site profiles was included.

Many local governments recognize that the amendments, which came into force on April 1, 1997 will significantly reduce exposure to liability if approving zoning or development on contaminated sites. However, others have raised questions about possible liability from carrying out site profile functions.

Independent Legal Review of Local
Government Administrative Liability
These concerns led the ministry to seek
independent legal advice. In 1995, questions
were submitted to a panel of legal experts who
are members of the Canadian Bar Association.
The ministry has encouraged the adoption of
the panel's recommendations at the earliest
opportunity.

This update addresses common questions relating to administration of site profiles under the new legislation. It explains the immunity provided by the legislation and draft regulation. A companion document,

fact sheet 8, discusses the immunity and liability issues facing local governments in their capacity as land owners. Fact sheet 5 describes how site profiles affect local government's administrative workload.

Can a Local Government Become Liable for Negligently Administering Site Profiles? No. The Act provides broad immunity for local governments when administering site profiles, even protecting them against negligent acts. They are not, however, protected in cases of acts of bad faith.

Does the Immunity Apply to Both Local Government Officials and Corporations? Yes. The Act provides protection for local government officials and local government corporations administering site profiles. However, amendments to the Municipal Act and the Land Title Act do not provide new protections in the area of corporate liability.

Could Local Government be Held Liable for Not Checking the Accuracy or Reporting Errors, if a Person Provides Wrong Information in a Site Profile?

No. The person providing the site profile is responsible for providing honest and accurate answers. After ensuring that all the questions are answered, local government is required only to assess the facts in a site profile as it is submitted. This is a simple clerical task that does not require professional judgment.



FACTS ON CONTAMINATED SITES The Site Profile System

Consultations on proposed contaminated sites amendments to the Waste Management Act (the Act), revealed that local governments wanted a legally defined, uniform process to screen potentially contaminated sites. In response, the ministry developed a site profile system, which was incorporated into the Act and Contaminated Sites Regulation (the regulation) on April 1, 1997.

This fact sheet provides an overview of the site profile system, describing the general features, and directing the reader to other fact sheets and ministry publications providing details on specific site profile issues.

What are Site Profiles?

These are forms that require information about the past and present uses of a site, as well as basic land descriptions. They require readily available information, and should not require the assistance of a consultant to complete. The content and format of a site profile is provided in Schedule 1 of the regulation. BC Environment has prepared a "user friendly" version of the site profile which contains additional official use sections. Site profile users are encouraged to use this version of the form.

Sections IV through VIII are key parts of the site profile. They consist of a series of questions requiring "yes" or "no" responses, regarding areas of the site of potential concern,

the presence of fill, waste, tanks or containers or hazardous substances.

When Must a Site Profile be Completed? There must be a legal trigger in the Act or regulation for a site profile to be completed and submitted. Site profiles submitted to the ministry for other reasons are not legally considered site profiles, and are not subject to the usual site profile processing requirements. The reader may consult the BC Environment guidance document 7, "Completing and Submitting Site Profiles" for instructions.

Three Step Decision Process Deciding if a site profile is required inv

Deciding if a site profile is required involves a three step process:

Step 1. Determine if any of the activities listed in Schedule 2 have occurred on the site

Schedule 2 of the regulation is a list of commercial and industrial activities and uses that are considered to be associated with potential contamination of a site. The general categories of uses and activities include:

- chemical industries
- electrical equipment industries
- mining and milling industries
- petroleum and natural gas industries
- transportation industries
- waste disposal and recycling
- wood, pulp and paper industries



20

FACTS ON CONTAMINATED SITES

The Site Registry

New contaminated sites provisions under the Waste Management Act (the Act) and Contaminated Sites Regulation require the province to provide public information about site investigations and cleanups. A new Site Registry is available to meet this requirement.

What is the Site Registry?

The Site Registry documents milestones in the site cleanup process, and provides public access to this information. It contains information on sites which have been investigated and cleaned up since BC Environment began recording this activity.

The Site Registry is not a registry of contaminated sites. There are some sites in the Site Registry which are contaminated, but most sites are simply investigated and require little, if any cleanup, or have already been cleaned up to government standards.

Electronic and Paper Records

The Site Registry contains both electronic and paper records. The electronic Site Registry contains general information on site investigation and cleanups for all sites known to BC Environment. It summarizes the investigation and cleanup story for each site. The paper Site Registry contains detailed information in documents from which the electronic Site Registry information is created.

What is Contained in the Site Registry? A detailed listing of information required in the Site Registry is contained in the Act and Part 3 of the Contaminated Sites Regulation. The electronic Site Registry currently contains information generally grouped under five categories.

- 1) General information on a site's location, fee category, overall cleanup status and most current site profile.
- 2) Notations information on legal events such as issuance of pollution abatement, pollution prevention and remediation orders, Certificates of Compliance and Approvals in Principle. Administrative notations, for example on site investigation and remediation reports are included.
- 3) Participants information on people and/or organizations involved in a site and their roles.
- 4) Documents information on the existence of reports concerning a site.
- 5) Land Use information on the land use considered related to a site.

Two categories still to be developed are:

- Assessments general information on the main substances found at a site.
- Remediation Plans general information on different cleanup plans used and target cleanup standards.

What will it cost to Search the Registry? The cost of a Site Registry search varies

depending on the level of detail you require. Specific prices are listed in the following table:

	Search Activity	Price*
1)	To request a search by Land Titles Parcel Identifier (PID) number	\$10.00
2)	To request a search by Crown Lands Parcel Identification Number (PIN)	\$10.00
3)	To request a search by Crown Lands file number	\$10.00
4)	To request a search by BC Environment Site ID number	\$10.00
5)	To request a search by address	\$15.00
6)	To request a search within 0.5 kilometres of a site's latitude and longitude	\$20.00
7)	To request a search within 5.0 kilometres of a site's latitude and longitude	\$50.00
8)	To access the Synopsis Report for a site	\$5.00
9)	To access the Detail Report for a site	\$30.00
10)	Surcharge for government assistance in carrying out the search	\$5.00

^{*} Please note that 7% GST will be added. Also, note that a Nil Search, which does not find any sites matching the search criteria, is charged at the full rate for the type of search used.

Will the Information on a Site Always be Available on the Site Registry?

Sometimes information on a site will be in the "pending" state. This is because the data for that site is either under review or being updated. For these sites a Synopsis Report will only be available. If you select the Detail Report for a site with a "pending" status, the system will automatically produce a Synopsis Report, with a charge of \$5.00.

What if I Need More Information?

If more detailed information is required after searching the electronic Site Registry, the paper Site Registry may be accessed. Contact your regional BC Environment office for an application form and instructions.

For more information, contact the Pollution Prevention and Remediation Branch, (250) 387-4441, your regional BC Environment office (see attached list), or the BC OnLine help desks at (250) 952-6777 (Victoria) or (604) 775-2265 (Vancouver).

can use to help clarify if exemptions or minor contributor status is applicable, and the respective shares of responsible parties. The panel will make recommendations to a regional Pollution Prevention Manager, the government official vested with authority for many regulatory actions.

Public Consultation and Review Sometimes the public is concerned about any health or environmental effects of a site. Persons may want information on possible contamination or to review and comment on remediation plans. The legislation provides for public consultation and review of remediation plans.

Independent Remediation At many sites, responsibility for remediation costs is not in dispute. 'Remediation may be routine, methods of treatment are readily available, and with the assistance of capable engineering or environmental consultants a site cán be remediated with very little involvement by a regulator. So with requirements stated in regulations and environmentally responsible care by site owners, independent site cleanups are practical and sensible. Independent remediation carried out in accordance with regulations is allowed under the legislation, provided the ministry is notified at the onset and at the completion of remediation. Notations will be entered in the site registry.

Five Part Site Management Process The legislation proposes a five part process for managing contaminated sites. Every site need not proceed through each component. For example, many sites, once investigated, will be found not to be contaminated, and require no further attention. The five components are:

- 1. Identification and assessment;
- Investigation and determination/decision;
- 3. Planning;
- 4. Remediation; and
- 5. Evaluation/monitoring.
- 1. Identifying and Assessing Sites Site profiles are an important mechanism for BC Environment to identify potentially

contaminated sites. They will contain readily available information and should not require the assistance of a consultant to complete. Site profiles will usually be required when a local government receives an application for subdivision, zoning, development, demolition of a structure or soil removal (at specific types of former commercial or industrial operations), or when ordered by a regional BC Environment manager. They will be assessed by a local government official, another ministry or BC Environment. The assessment will determine if a site should be subject to further investigation. If not, the site profile will be sent to the Site Registry.

- 2. Investigating Sites A preliminary site investigation and a detailed site investigation may be required. They may be prompted by a site profile or other information a regional Pollution Prevention Manager may receive.
- Preliminary site investigations assess the probability of site contamination through archival records, site visits and knowledge of historical activities conducted on site.
- Detailed site investigations confirm or refute the potential of site contamination by sampling and chemical analysis of soils, sediments, surface water and groundwater.

The legislation provides for numerical and risk-based standards to determine when cleanup is needed and satisfactorily completed. The regulations give further details about the magnitude and use of standards in cleaning up sites.

Legally Determining if a Site is Contaminated Provision is made for a preliminary determination and final determination by a regional Pollution Prevention Manager, with notification of liable parties at each stage. A determination is not required for every site, but a lack of a determination does not mean a site is not contaminated. For example, independent remediation may occur or a voluntary remediation agreement may be developed without a formal determination.

The legislation provides an optional approval in principle. Investigation results, evaluation of remediation options, public consultation input and remediation plans would be reviewed, and if satisfactory could culminate in a manager issuing an approval in principle. Contaminated Soil Relocation Excavation at a contaminated site may be required to develop underground facilities. Relocating surplus soil, either to a landfill, or for use as fill at another site may in some cases also be an acceptable remediation option. In the past, the

are needed, including appropriate standards. Contaminated soil relocation agreements are included in the legislation. These agreements, along with requirements for information on soil quality and conditions of the environment at a deposit site, provide a uniform system of managing soil relocation.

management of excavated soils has often been

surrounded by uncertainty. Adequate controls

4. Implementing Remediation Remediation is defined in the legislation to cover all stages of site management from preliminary investigations, through implementing remediation procedures, to final monitoring. However, remediation is commonly viewed more narrowly as the removal or treatment required to clean up or secure a site.

The legislation provides a framework for two broad types of remediation. Contamination may be: 1) removed so that it no longer remains at a site or 2) treated onsite. The regulation provides standards for the quality of soils and water that may remain at a site when cleanup is considered complete. Or, health risk assessment and environmental impact assessment may be used to document that under a specific use, contamination may remain onsite. Additional protective measures may have to be installed.

5. Documenting Remediation Completion Remediation completion documents can be provided for the two types of remediation above. Certificates of compliance can be issued if numerical standards in the regulations have been satisfied. Conditional certificates of compliance can be issued if risk-based standards and related assessment procedures have been applied. In both cases, financial guarantees or other security may be required.

Confirmatory sampling and analysis to the satisfaction of BC Environment are normally required if a certificate of compliance is to be issued. When contamination is managed onsite, certain conditions must be adhered to. These are necessary, for example, for protection of the environment or human health, or notification of future site owners, operators or adjoining owners or operators. Current practice requires that a restrictive covenant be registered on the property title. BC Environment believes that a conditional certificate of compliance and the Site Registry will substitute in many cases for a restrictive covenant under the Land Title Act.

Declaration of Need for Remediation Some sites may require prompt action if they pose a serious threat to the environment or human health. The legislation authorizes the Minister to declare the need for remediation a a high risk orphan site or another site. Labour, services, materials, equipment, and entry onto land may be ordered. The legislation also provides access to provincial funds for orphan site cleanup.

Future Action Similar to other jurisdictions, provision is made for 'reopening' the issue of remediation at a site. Conditions which migh compel such action include:

- additional information about a person's responsibility;
- a change in standards precipitated, for example, by new toxicity information; or
- failure to exercise due care in managemen of contamination.

For more information, contact the Pollution Prevention and Remediation Branch, 387-444

What if I Need More Information on a Site? If more detailed information is required after searching the electronic Site Registry, the paper Site Registry may be accessed. Contact your regional BC Environment office for an application form and instructions.

For more information, contact the Pollution Prevention and Remediation Branch, (250) 387-4441, your regional BC Environment office (see attached list), or the BC OnLine help desks at (250) 952-6777 (Victoria) or (604) 775-2265 (Vancouver).

Specific Amendments The following are the leaves the

The following are the key changes:

Section 28.6 (1)

Definition of a "protected person" — someone who is given immunity for contaminated sites administrative functions under the *Act*. For local governments, these include:

- a municipality [corporate capacity]
- a current or former approving officer
- a current or former "municipal public officer" under the Municipal Act or "civic public officer" under the Vancouver ______ Charter.

Section 28.6 (2)

Expanded immunity to cover a number of activities under a series of statutes: the Waste Management Act, Land Title Act, Municipal Act, the Vancouver Charter, and Islands Trust Act. These now include:

- acts [actions]
- advice, including pre-application advice
- recommendations
- purported exercise or performance of powers, duties or functions
- failure to carry out or provide the above.

Section 28.6 (3)

The circumstance where a protected person does not retain immunity are described in this section. These include the situations where a protected person:

- is responsible for cleaning up contamination as defined in the Act, or
- was dishonest, malicious or exhibited wilful misconduct.

Section 28.6 (4)

This section addresses immunity of local governments who rely on a Preliminary or Final Determination of contamination, an Approval in Principle, or either of the two types of Certificates of Compliance. Compared with the previous version of the legislation, it expands coverage to include determinations, and clarifies that this reliance must be honest, and without malice or wilful misconduct.

Section 28.6 (5)

The final section addresses the case where a local government is formally delegated the ability to issue an Approval in Principle, Certificate of Compliance, or Conditional Certificate of Compliance under the Act. Like subsection 4, it clarifies that if a local government is to retain immunity, these items must have been prepared honestly, and without malice or wilful misconduct.

What are the Implications?

In simple terms, local governments now have broadened liability protection. This will have a direct effect in several areas:

Site Profile Administration

The Contaminated Sites Regulation provides an opportunity for local governments to opt out of the site profile administration system. Some local governments have opted out because of concerns about their liability in administering the system. The enhanced immunity provided in these amendments should eliminate these concerns.

Other Delegated Functions

With enhanced liability protection for delegated functions, local governments may now wish to consider taking on responsibility for administering additional items such as site investigations, Approval in Principles, and Certificates of Compliance.

Note: This summary is solely for the convenience of the reader. The original legislation and regulations should be consulted for complete information.

For more information, contact the Pollution Prevention and Remediation Branch, at (250) 387-4441. October 1997

"A person is exempt from the duty to provide a site profile with respect to any site within a municipality . . . where the municipality has filed written notice with the Minister that it does not wish to receive site profiles . . ."

This exempts a local government, by removing the duty of a person, such as a developer, to submit site profiles in that jurisdiction. To exercise this option, the local government needs to notify the Minister of Environment, Lands and Parks in writing that it does not wish to receive site profiles under provincial contaminated sites legislation.

What are the Consequences if a Local Government Opts Out of the System? If a local government opts out of the site profile system, it will no longer have legal responsibility under the Waste Management Act to screen sites using site profiles. There will be no site profile system for the geographic area for which that jurisdiction is responsible. This will have a number of effects, some of which are discussed below.

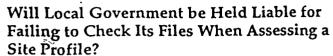
What are the Pros and Cons of Opting Out? Advantages:

- removes any liability concerns about site profile administration by local governments;
- eliminates barriers in contaminated site legislation to local government approval of zoning and development applications;
- eliminates local government training and administration costs for the site profile system;
- allows local governments to develop their own screening system; and
- allows local governments to ignore, as a matter of policy, the screening of potentially contaminated sites.

Disadvantages:

- nonexistent provincial site profile system for the area for which the opting out local government is responsible;
- increased local government liability in assessing development and zoning applications without a legally defined process to screen for contaminated sites;
- higher administration and training costs if a local government develops and administers its own screening system;
- some contaminated sites, including high risk sites, could escape detection or be detected late, for example during excavation, in those jurisdictions which have no site screening system;
- unacceptable impacts on human health, the environment, and infrastructure could occur or continue, particularly if high risk sites are not identified;
- increased remediation costs for cleaning up sites detected late in the development process due to time delays and new planning requirements;
- loss of income for processing site profiles.
 Local governments may charge up to \$50 per site profile under the Contaminated Sites Regulation;
- much less data is entered onto the Site Registry for the area covered by the local government. Developers and others seeking information on contamination will be more likely to seek this information from a local government source rather than the Site Registry; and
- loss of province-wide uniformity.
 Developers would face a patchwork of screening requirements if some local governments used the provincial system, and others their own screening tools.

For more information, contact the Pollution Prevention and Remediation Branch, 387-4441



No. Under the Contaminated Sites Regulation, local government has no duty to conduct a search of its records or archives relating to the submission of site profiles. If it wishes, a local government may review its own records and forward site profiles to the ministry on the basis of that information.

Does the Act or Regulation Impose a Duty on Local Governments to Disclose Site Profiles to the General Public?

No. Local governments must only disclose a site profile to BC Environment and to the person who originally provided it.

How Does the Freedom Of Information And Protection Of Privacy Act Relate?
Under the Freedom of Information and Protection of Privacy Act, the public has certain rights to obtain information in the possession of local governments. However, these rights are qualified under the Act where the information sought is available for purchase from the ministry.

The Act establishes a computerized Site Registry which contains information entered on site profiles. The public has access to this system through BC OnLine, for a fee. Thus, local governments are not required to disclose site profiles to the public if they are already available through the Site Registry.

After Local Government Assesses and Forwards a Site Profile, Does It Have a Duty, and a Corresponding Potential Liability, to Store or Manage Site Profiles?

No. Local governments do not have to store

No. Local governments do not have to store or file old site profiles. In fact, the regulation allows local governments to determine what to do with old site profiles.

Will Local Government Incur Liability for Mistakenly Approving an Application? A developer might lose money or incur other damages because of local government's premature approval of an application. This could happen in situations where the local government mistakenly forgets to wait to receive appropriate notification from BC Environment that contamination issues have been adequately addressed.

In such cases, the developer could sue the local government for negligence and the local government could be found corporately liable under current municipal legislation.

However, municipal legislation does provide immunity for local government officials who act negligently but in good faith. Whether local governments should receive corporate liability protection is currently under review by the province.

Would Local Government be Held Liable Where a BC Environment Manager Makes a Mistake?

No. The Act clearly states that a local government and its officials will not be liable for damages where they rely on an approval in principle for a remediation plan or a certificate of compliance with the provincial standards from a regional Pollution Prevention Manager. Once local government receives one of these documents, it may proceed to approve the relevant application.

For more information, contact the Pollution Prevention and Remediation Branch, (250) 387-4441.

The person completing the site profile determines if any of the specific activities or uses in any of the above general categories is occurring or has occurred on the site. If the answer is no, then there is no requirement to complete a site profile. If the answer is yes, then a site profile may have to be completed.

Step 2. Establish if a specific type of application or activity is involved. If any of the following applications or activities specified in the legislation are involved, a site profile may have to be completed:

- Applying for subdivision, zoning, development or development variance, soil removal, or demolition.
- 2) Decommissioning a site
- Taking over a property as a trustee, receiver or liquidator.
- Selling property which has or had a Schedule 2 activity on it.
- 5) Applying for a Certificate of Restoration under the *Petroleum and Natural Gas Act*.
- 6) Applying for a permit or permit revisions under section 10 of the *Mines Act*.
- 7) Giving notice of intention to stop work at a mine before abandonment under the Mines Act.

Step 3. Decide if any exemptions apply There are over ten exemptions from the requirement to submit a site profile. The reader should consult the regulation or the BC Environment guidance document 8 described above for further detail.

In summary, a site profile must be competed and submitted if a Schedule 2 use or activity applies, a specific type of activity or application is involved, and there are no applicable exemptions. In addition, a site profile must be submitted if one is ordered by a regional Pollution Prevention Manager from BC Environment.

To Whom are Site Profiles Submitted?
Site profiles are submitted to different parties, depending on the items summarized in Step 2 above. Items 1 and 2 involve local government officials, and sometimes a regional Pollution Prevention Manager from BC Environment. Under item 3, a site profile will be submitted to a regional Pollution Prevention Manager. Item 4 involves submission to a prospective purchaser of property, and items 5 through 7, involves submission to officials from the BC Ministry of Employment and Investment.

Assessing Site Profiles

Once a site profile is submitted, it is assessed by the party to whom it is submitted within 15 days. If it is not satisfactorily completed, it will be returned for correction. When satisfactorily completed, the site profile will be assessed. If there are any "yes" responses in sections IV through VIII, and if the site profile was submitted to local government, it will be forwarded to a regional Pollution Prevention Manager. The person submitting the site profile will be informed within 15 days if this has been done. If there are all "no" responses, the site profile will be forwarded to the Site Registrar in Victoria.

Site Investigations

Once a site profile has been received by a regional Pollution Prevention Manager, he or she will determine whether a site investigation will be required. Other fact sheets in this series will focus on site investigations.

For more information, contact the Pollution Prevention and Remediation Branch, at (250) 387-4441.

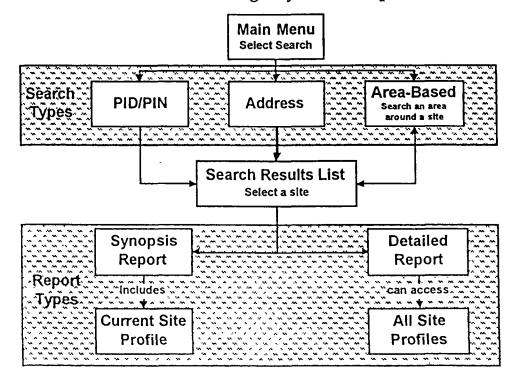
How Can I Access Site Registry Information? The electronic Site Registry is accessed through BC OnLine, which provides access to government databases like the Land Titles system. Contact the BC OnLine Help Desk at (250) 952-6777 (Victoria), (604) 775-2265 (Vancouver) or toll-free (800) 663-6102 to set up an account. The electronic Site Registry may also be searched by others for you. Call your regional BC Environment office or local Government Agent for advice.

Fees for accessing this information vary with the method of search and level of detail necessary to meet user requirements. The less detail required, the lower the fee. Given the diverse nature of site locations in BC, the electronic Site Registry allows a user to search three ways for information:

- Numeric search: by Parcel Identifier (PID), Crown Land Parcel Identification Number (PIN) or file number, and Site Identification Number (SID).
- 2) Civic address search: by specific or general address.
- 3) Area-based search: by the latitude and longitude coordinates of a property to search within a 0.5 km or 5 km radius of a property for sites in the vicinity.

The user is presented with a search results list of sites. He or she can then select a site, request a synopsis or detailed report for that site, print it, and then return to the search results list to repeat the process. The flow chart below shows the different search methods and reports that are available.

Electronic Site Registry Search Options



BC ENVIRONMENT CONTACTS ON CONTAMINATED SITES ISSUES

BC Environment Regional and Sub-Regional Offices

 BC Environment Vancouver Island Regional Office 2080-A Labieux Road Nanaimo, British Columbia V9T 6J9
 Tel: 250-751-3100

Tel: 250-751-3100 Fax: 250-751-3103

Attention: Pollution Prevention Manager

2) BC Environment Lower Mainland Regional Office 10470 152nd Street Surrey, British Columbia V3R 0R3 Tel: 604-582-5200

Tel: 604-582-5200 Fax: 604-582-5334

Attention: Pollution Prevention Manager

 BC Environment Southern Interior Regional Office 1259 Dalhousie Road Kamloops, British Columbia V2C 5Z5

Tel: 250-371-6200 Fax: 250-828-4000

Attention: Pollution Prevention Manager

 BC Environment Southern Interior Sub-Regional Office 201 - 3547 Skaha Lake Road Penticton, British Columbia V2A 7K2

Tel: 250-490-8200 Fax: 250-492-1314

Attention: Pollution Prevention Manager

 BC Environment Kootenay Regional Office 401 - 333 Victoria Street Nelson, British Columbia V1L 4K3

Tel: 250-354-6355 Fax: 250-354-6367

Attention: Pollution Prevention Manager

6) BC Environment
Kootenay Sub-Regional Office
205 Industrial Road G
Cranbrook, British Columbia
V1C 6H3
Tel: 250-489-8510
Fax: 250-498-8506

7) BC Environment

Attention: Environmental Safety Officer

Omineca-Peace Regional Office 1011 - 4th Avenue Prince George, British Columbia V2L 3H9

Tel: 250-565-6155 Fax: 250-565-6629

Attention: Pollution Prevention Manager

 BC Environment Cariboo Regional Office Suite 400 - 640 Borland Street Williams Lake, British Columbia V2G 4T1

Tel: 250-398-4533 Fax: 250-398-4296

Attention: Pollution Prevention Manager

 BC Environment Skeena Regional Office 3726 Alfred Street Bag 5000 Smithers, British Columbia

V0J 2N0 Tel: 250-847-7260 Fax: 250-847-7591

Attention: Pollution Prevention Manager

BC Environment Victoria Headquarters Office

Mailing Address

BC Environment
Pollution Prevention & Remediation Branch
Box 9342 Stn Prov Govt
Victoria, BC V8W 9M1
Attention. Unit Head, Contaminated Sites
Remediation Unit
Telephone 250-387-4441

Delivery address:

BC Environment
Pollution Prevention & Remediation Branch
3 - 2975 Jutland Road
Victoria, BC V8T 5J9
Attention. Site Administrator
Fax: 250-387-9935